

**RTI 101:
Screening and
Progress Monitoring**

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Defining RTI

Response to intervention (RTI) integrates assessment and intervention within a school-wide, multi-level instructional system to maximize student achievement and reduce behavior problems. With RTI, schools identify students at risk for poor learning outcomes, monitor student progress, provide evidence-based interventions and adjust the intensity and nature of those interventions depending on a student's responsiveness, and may be used as part of the determination process for specific learning disabilities.

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RTI as a General Education Framework

- RTI is a multi-level instructional framework aimed at improving outcomes for ALL students.
- RTI is preventative and provides immediate support to students who are at risk for academic failure.
- RTI may be a *component* of a comprehensive evaluation for students with learning disabilities.

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Essential RTI Components

- School-wide, Multi-level Instructional System for Preventing School Failure
 - Primary
 - Secondary
 - Tertiary
- Screening
- Progress Monitoring
- Data-Based Decision Making for:
 - Instruction
 - Movement within the multi-level system
 - Disability identification (in accordance with state law)

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Essential Components of RTI

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Essential Tiered System Components

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Selecting Appropriate RTI Assessments



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Types of Assessments

Type	When?	Why?
Summative	After	Assessment <u>of</u> Learning
Diagnostic	Before	Identify skill deficits
Formative	During	Assessment <u>for</u> Learning



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Summative Assessments

- PURPOSE: Tells us what students *learned* over a period of time (past tense)
 - May tell us *what* to teach but not *how* to teach
- Administered after instruction
- Typically administered to all students
- Educational Decisions:
 - Accountability
 - Resource Allocation (reactive)
 - Skill Mastery Assessment



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Summative Assessments

Examples:

- End of chapter tests
- High-stakes tests
- GRE, ACT, SAT, and GMAT
- Praxis Tests
- Final Exams



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Diagnostic Assessments

- PURPOSE: Measures a student's current knowledge and skills for the purpose of identifying a suitable program of learning
- Administered before instruction
- Typically administered to some students
- Educational Decisions:
 - What to Teach
 - Intervention Selection



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Diagnostic Assessments

EXAMPLES:

- Qualitative Reading Inventory
- Diagnostic Reading Assessment
- Key Math
- Running Records with Error Analysis



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Formative Assessments

- PURPOSE: Tells us how well students are responding to instruction
- Administered during instruction
- Typically administered to all students during benchmarking and some students for progress monitoring



Formative Assessments

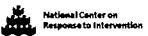
Educational Decisions:

- Rates of improvement (progress monitoring)
- Identification of students who are nonresponsive to instruction or interventions (screening)
- Curriculum and instructional decisions
- Program evaluation
- Resource allocation (proactive)
- Comparison of instruction and interventions efficacy



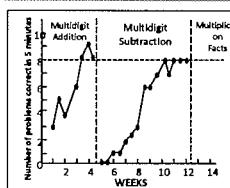
Formative Assessments

- Formal and informal
- Mastery measures (e.g., intervention or curriculum dependent)
- General Outcome Measures (e.g., CBM)
 - AIMSweb – MAZE, R-CBM, Early Literacy, Early Numeracy
 - Dynamic Indicators of Basic Early Literacy Skills (DIBELS) – Early Literacy, Retell, and D-ORF
 - iSTEEP – Oral Reading Fluency

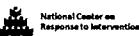
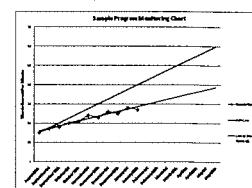


Common Formative Assessments

Mastery Measurement



General Outcome Measures



Summative or Formative?

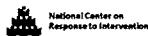
Educational researcher Robert Stake used the following analogy to explain the difference between formative and summative assessment:

“When the cook tastes the soup, that's formative. When the guests taste the soup, that's summative.”

(Scriven, 1991)



RTI Formative Assessments: Screening



Screening

- PURPOSE: identify students who are at risk of academic failure
- FOCUS: conducted for all students
- TOOLS: involves brief assessments that are valid, reliable, and evidence-based
- TIMEFRAME: administered more than 1x per year (e.g., Fall, Winter, Spring)



Screening

Answers the questions:

- Is our core curriculum working?
- Is instruction effective?
- Which students need additional assessment and interventions ?



Screening

- All children are assessed to determine who needs additional support.
- RTI success depends on accurate identification of this at-risk pool.
- Perfect screening would result in 100% accurate identification of "True Positives" (those who need additional support) and "True Negatives" (those who do not need additional support).



Screening Considerations

When selecting screening tool, consider –

- Timing
 - Screeners must target skills pertinent to the grade and time the screen is administered.
- Accuracy
 - Essential for preventing costly identification errors.
 - Choice of cut-off score will affect classification accuracy (sensitivity and specificity).



Screening Considerations

- Choice of outcome measure:
 - *What is the criterion?*
 - *What are we predicting to?*
- Should be educationally valid outcome.
- Schools must choose age-appropriate outcome measures that capture student ability.



NCRTI Screening Tools Chart

Tool group	Area measured	Classification accuracy	Consistency	Reliability	Validity	Dissimilarity Reliability Classification Different Populations	Efficiency			
							Administration Format	Administration & Scoring Time	Scoring Key	
Alttools	Percentile Based Assessment E-Gage	○ Moderate (0)	●	●	—	—	Individual	2 Hours	Yes	
Dynamis Indicators of Basic Early Literacy Skills (DEBLS)	Dynamic Literacy Skills	○ Moderate (0)	●	○	—	—	Individual	2 Hours	Yes	
	Oral Reading Skills	○ Moderate (0)	●	○	○	—	Individual	2 Hours	Yes	
	Phonological Awareness Skills	○ Moderate (0)	●	○	○	—	Individual	2 Hours	Yes	
Echolistic Reading Successor Assessment	○ Moderate (0)	●	○	—	—	Individual Group	10 Minutes	Computer Scored	No	
STAR Early Literacy	○ Read	●	○	●	●	—	Individual Group	10 Minutes	Computer Scored	Yes
STEPP Oral Reading Skills	○ Moderate (0)	●	●	●	—	Individual Group	10 Minutes	Computer Scored	Yes	
	○ Moderate (0)	●	●	○	—	Individual	1 Hours	Yes	Yes	

Chart Legend: ● Commonly Evidence | ○ Partially Common Evidence | ○ Uncertaining Evidence | — No Evidence Submitted

www.rti4success.org

**RTI Formative Assessments:
Progress Monitoring**



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Progress Monitoring

- PURPOSE: monitors student response to primary, secondary, or tertiary instruction
- FOCUS: students identified as at risk for poor learning outcomes
- TOOLS: involves brief assessments that are valid, reliable, and evidence-based
- TIMEFRAME: students are assessed at regular intervals (e.g., weekly, bi-weekly, monthly)



Progress Monitoring

Answers the questions:

- Are students meeting short- and long-term performance goals?
- Are students making progress at an acceptable rate?
- Does the instruction or intervention need to be adjusted or changed?



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Using Progress Monitoring Data

- Graphed data allows teachers to quantify rate of student improvement:
 - Increasing scores indicate student is making progress and responding to the curriculum.
 - Flat or decreasing scores indicate unresponsiveness.
 - Student is not benefiting from instruction and requires a change in the instructional program.



Progress Monitoring Data

Increasing Scores:

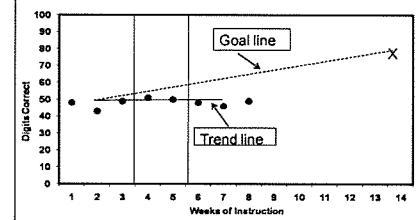
Weeks of Instruction	Digits Correct
1	45
2	42
3	48
4	50
5	52
6	55
7	58
8	60
9	62
10	65
11	68
12	70
13	72
14	75



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Progress Monitoring Data

Flat Scores:



Progress Monitoring Tools Chart												
		General Outcome Measures						Mastery Measures				
TOOLS	AREA	Established Evidence Level Score	Established Evidence Level Score	Validated Performance Level Scores	Classification Level Scores of Measures	Alternate Forms	Sensitivity to Instructional Interventions	End-of-Year Benchmark	End-of-Year Standard	Norm-referenced Score	Elementary School Measures of Mathematics and Science	
Curriculum-based Measures in Reading and Mathematics	Mathematics	●	●	●	●	●	●	●	●	●	●	
Curriculum-based Measures in Reading and Mathematics	Mathematics	●	●	●	●	●	●	●	●	●	●	
Curriculum-based Measures in Reading and Mathematics	Mathematics	●	●	●	●	●	●	●	●	●	●	
Curriculum-based Measures in Reading and Mathematics	Mathematics	●	●	●	●	●	●	●	●	●	●	
Dynamic Indicators of Basic Early Literacy Skills (DIBELS)	DIBELS	●	—	●	—	●	●	○	○	○	—	
Dynamic Indicators of Basic Early Literacy Skills (DIBELS)	DIBELS	●	—	●	—	●	●	○	○	○	—	

Putting It All Together: Designing a Tiered-System of Assessment



Designing an Effective Assessment System

- Scheduling Assessment Administration
- Selecting Evidenced-Based Tools
- Establishing Data-Based Decision Making Criteria
- Ensuring Implementation Integrity

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Scheduling Assessment Administration

- Universal screening:
 - Generally administered more than 1x per year: Fall, Winter, Spring.
- Progress monitoring:
 - Conducted frequently and at regular intervals (e.g., weekly, bi-weekly, monthly).



Selecting Evidenced Based Tools: NCRTI Screening Tools Chart												
TOOLS	AREA	Classification Accuracy	Reliability	Validity	Disaggregated Student-level Classification Data	Efficiency	Administration Format	Administration & Scoring Time	Scoring Time	Norm-referenced Score	Elementary School Measures of Mathematics and Science	
Dynamic Indicators of Basic Early Literacy Skills (DIBELS)	DIBELS	●	●	●	—	Individual	2 Minutes	Yes	Yes	—	—	
Dynamic Indicators of Basic Early Literacy Skills (DIBELS)	DIBELS	●	●	●	—	Individual	2 Minutes	Yes	Yes	—	—	
Dynamic Indicators of Basic Early Literacy Skills (DIBELS)	DIBELS	●	●	●	●	Individual	2 Minutes	Yes	Yes	—	—	
Dynamic Indicators of Basic Early Literacy Skills (DIBELS)	DIBELS	●	●	●	●	Individual	2 Minutes	Yes	Yes	—	—	
Dynamic Indicators of Basic Early Literacy Skills (DIBELS)	DIBELS	●	●	●	●	Individual	2 Minutes	Yes	Yes	—	—	
Dynamic Indicators of Basic Early Literacy Skills (DIBELS)	DIBELS	●	●	●	●	Individual	2 Minutes	Yes	Yes	—	—	
STAR Early Literacy	STAR	●	●	●	—	Individual Group	32 Minutes	Computer Based	Yes	—	—	
STAR Early Literacy	STAR	●	●	●	●	Individual Group	10 Minutes	Computer Based	Yes	—	—	
STAR Early Literacy	STAR	●	●	●	●	Individual Group	10 Minutes	Computer Based	Yes	—	—	
STAR Early Literacy	STAR	●	●	●	—	Individual	1 Minutes	Yes	Yes	—	—	

Chart Legend: ● = Convincing Evidence | ○ = Partially Convincing Evidence or Convincing Indirect Evidence | □ = Unconvincing Evidence | — = No Evidence Submitted

<http://www.rti4success.org/chart/screeningTools/screeningtoolschart.htm>

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Content and Language of Chart

3 aspects of tool quality: technical rigor, efficiency, & implementation requirements

TOOLS	AREA	Classification Accuracy	Reliability	Validity	Disaggregated Student-level Classification Data	Efficiency
Dynamic Indicators of Basic Early Literacy Skills (DIBELS)	DIBELS	●	●	●	—	Individual

Technical rigor:

- Classification Accuracy
- Generalizability
- Reliability
- Validity
- Disaggregated data



Content and Language of Chart

Tool	AAA	Classification	Downloadable	Reliability Tables	Prescribed Reliability of Tools	Administration Format	Administration & Scoring Time	Scoring Key	Norms/Benchmarks

Efficiency:

- Administration format
- Administration and scoring time
- Scoring key
- Norms/benchmarks

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Content and Language of Chart

Implementation Requirements:

- Cost of tool?
- Training required to implement tool?
- Level of expertise required to administer tool?
- Training and technical support offered?
- How are scores reported?

Click name of tool to view "implementation table"

Tool	Implementation Requirements

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Content and Language of Chart

Data:

- Detail about data submitted to TRC.
- Look for tools that conducted classification studies with outcome measures and samples similar to your population and outcome of interest.
- More information to help you determine which tool(s) is most appropriate for which populations of students.

Click on any rating bubble to view data

Tool	General Outcome Measures	Classification	Implementation Requirements	Reliability of Tools	Administration Format	Administration & Scoring Time	Scoring Key	Norms/Benchmarks

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NCRTI Progress Monitoring Tools Chart

Tool	General Outcome Measures		Classification		Implementation Requirements		Reliability of Tools		Administration Format		Administration & Scoring Time		Scoring Key		Norms/Benchmarks		Reliability of Tools	
	Reliable	Valid	Reliable	Valid	Reliable	Valid	Reliable	Valid	Reliable	Valid	Reliable	Valid	Reliable	Valid	Reliable	Valid	Reliable	Valid
ADLs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Calculus	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Chemical Education	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Elementary Math	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
English Language Arts	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
French Immersion	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mathematics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Science	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Social Studies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Spanish Immersion	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

http://www.rti4success.org/chart/progressMonitoring/progressmonitoringtoolchart.htm

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Content and Language of Chart

Information on two types of progress monitoring tools:

1. General outcome measures: overall competence in annual curriculum
2. Mastery measures: successive mastery of a hierarchy of objectives

Click on any rating bubble to view data

Tool	General Outcome Measures	Mastery Measures

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Content and Language of Chart

General Outcome Measures

Tool	General Outcome Measures	Mastery Measures

9 standards for Technical Rigor:

- Reliability of the performance level score
- Reliability of the slope
- Validity level of the performance score
- Predictive validity for the slope of improvement
- Alternate forms
- Sensitive to student improvement
- End-of-year benchmarks
- Rates of improvement
- Disaggregated reliability and validity data

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Content and Language of Chart

Mastery Measures

6 standards for Technical Rigor:

- Skill sequence
- Sensitive to student improvement
- Reliability
- Validity
- Pass/fail decisions
- Disaggregated reliability and validity data

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Content and Language of Chart

Implementation Requirements:

- Cost of tool?
- Training required to implement tool?
- Level of expertise required to administer tool?
- Training and technical support offered?
- How are scores reported?

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Content and Language of Chart

Ratings & Implementation Data:

- Use implementation tables to identify which tools meet your criteria.
- Review technical ratings for the subset of tools you are interested in.
 - Work with technical expert to understand how each standard is relevant to your needs and the relative importance of a “convincing” rating for each standard.
- Carefully consider your unique and specific needs when selecting tool(s).

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Tips for Using the Tools Charts

- Designed to assist you in selecting most appropriate tool for your classroom, school, or district.
- Six-step process for using the charts:
 1. Gather a team
 2. Determine your needs
 3. Determine your priorities
 4. Familiarize yourself with the content and language of the chart
 5. Review for data
 6. Ask for more information

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Data Decisions Using Screening Data

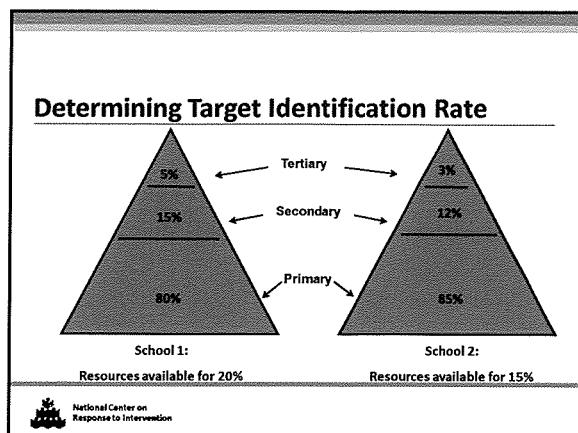
- Ranking students
- Disaggregating students
 - General education
 - Special education
- Examining grade and class level growth rates

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Establishing Decision Criteria: Determining Target Identification Rate

- Target identification rate is the proportion of students to be identified at-risk.
 - May depend on program objectives and resources.
- Unique target identification rates may be specified for different skill areas (e.g., larger target identification rate for word reading than for comprehension due to resource availability).

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Establishing Procedures and Decision Criteria: Progress Monitoring

- Goals setting practices
- Progress monitoring schedules (i.e., frequency and duration)
- Data review schedules (e.g., every 4-6 weeks)
- Decision criteria for
 - Changing instruction or intervention
 - Raising goal
 - Referring for special services

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Implementing the RTI Framework

- Select and implement evidence-based practices and procedures for screening and progress monitoring.
- Implement screening and progress monitoring with integrity.
- Ensure cultural, linguistic and socioeconomic factors students bring to the classroom are reflected in tool selection and implementation.

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Need More Information?

National Center on Response to Intervention
www.rti4success.org

NCRTI Screening Tools Chart
<http://www.rti4success.org/chart/screeningTools/screeningtoolschart.html>

NCRTI Progress Monitoring Tools Chart
<http://www.rti4success.org/chart/progressMonitoring/progressmonitoringtoolschart.html>

National Center on Student Progress Monitoring
www.studentprogress.org

National Center on Response to Intervention

Questions?

National Center on Response to Intervention
www.rti4success.org

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IDEAS at Work
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www.rti4success.org.

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Screening Tools Chart:

Updated: November 30, 2009

The tools chart below reflects the results of the second annual review of screening tools by the [Center's Technical Review Committee \(TRC\)](#).

The Center defines screening as follows: Screening involves brief assessments that are valid, reliable, and evidence-based. They are conducted with all students or targeted groups of students to identify students who are at risk of academic failure and, therefore, likely to need additional or alternative forms of instruction to supplement the conventional general education approach.

Chart Features

- Across the top of the chart are the standards by which the TRC reviews each tool. Click on each standard for a detailed description of how the rating was defined.
- The vendors/developers of the tools have provided implementation information which includes the cost of the tool, what is needed to implement it, the support provided, how the tool is intended to be used, and with whom it should be used. To access this information, click on name of the tool in the "Area" column.
- The ratings in the chart can be clicked on to view the specific data submitted for Classification Accuracy, Generalizability, Reliability, Validity, and Disaggregated Data for Diverse Populations.

The National Center on RTI publishes this tools chart to assist educators and families in becoming informed consumers who can select screening tools that best meet their individual needs.

The Center's Technical Review Committee (TRC) on Screening independently established a set of criteria for evaluating the scientific rigor of screening tools. The TRC rated each submitted tool against these criteria but did not compare it to other tools on the chart. The presence of a particular tool on the chart does not constitute endorsement and should not be viewed as a recommendation from either the TRC on Screening or the National Center on RTI.

Please note that all submissions to the TRC review process were voluntary. An individual, firm, or other vendor whose tool appears on the chart chose to submit its tool for TRC review and then to have its tool and TRC ratings displayed on the chart. The National Center on RTI does not publish the names of individuals, firms, or other vendors who submit tools for review but decide against having the results included on the tools chart.

The National Center on RTI will issue another review of available reading and math screening tools in spring 2010.

TOOLS	AREA	Classification Accuracy	Generalizability	Reliability	Validity	Disaggregated Reliability, Validity, and Classification Data for Diverse Populations			Efficiency		
						Administration Format	Administration & Scoring time	Scoring Key	Benchmarks & Norms		
AIMSweb	*Math - CBM	○	Moderate High	●	○	—	Group	2 minutes	Yes	Yes	
	R-DBC Oral Reading	○	Moderate High	●	●	—	Individual	2 minutes	Yes	Yes	
	*Test of Early Numeracy - Missing Number	○	Broad	●	●	—	Group	2 minutes	Yes	Yes	
	*Test of Early Numeracy - Number Identification	○	Broad	●	○	—	Group	2 minutes	Yes	Yes	
	*Test of Early Numeracy - Oral Counting	○	Broad	●	○	—	Group	2 minutes	Yes	Yes	
	*Test of Early Numeracy - Quantity Discrimination	○	Broad	●	●	—	Group	2 minutes	Yes	Yes	
Discoveries Education Predictive Assessment	*Math	●	Moderate High	●	○	○	Group	40 minutes	Yes	Yes	
	*Reading	●	Moderate High	●	○	○	Group	40 minutes	Yes	Yes	
Dynamič Indicators of Basic Early Literacy Skills (DIBELS)	Letter Naming Fluency	○	Moderate Low	●	—	—	Individual	2 minutes	Yes	Yes	
	Nonsense Word Fluency	○	Moderate Low	●	○	○	Individual	2 minutes	Yes	Yes	
	Oral Reading Fluency	○	Moderate High	●	○	○	Individual	2 minutes	Yes	Yes	
	Phoneme Segmentation Fluency	○	Moderate Low	●	○	○	Individual	2 minutes	Yes	Yes	

TOOLS	AREA	Classification Accuracy	Generalizability	Reliability	Validity	Disaggregated Validity, and Classification Data for Diverse Populations	Efficiency	
							Administration Format	Administration & Scoring time
Indicators of Progress	*Reading	○	Moderate Low	●	●	○	Individual Group	13 - 21 minutes
PALS	*Kindergarten	○	Moderate High	●	○	○	Individual Group	23 - 43 minutes
	* Grades 1 - 3	●	Moderate High	●	●	○	Individual Group	23 - 43 minutes
Predictive Assessment of Reading	*Reading	●	Broad	●	●	●	Individual Group	16 minutes
Scholastic Phonics Inventory - Screener Version		○	Moderate High	●	○	—	Individual Group	10 minutes
STAR	Early Literacy	○	Broad	●	●	●	Individual Group	10 minutes
	* Math	○	Broad	●	●	●	Individual Group	10 minutes
i-Reading		○	Broad	●	●	●	Individual Group	10 minutes
STEEP	Dial Reading Fluency	●	Moderate High	●	○	—	Individual	1 minute

Chart Legend:

- Convincing Evidence ○ Partially Convincing Evidence ○ Unconvincing Evidence — No Evidence Submitted
- * Added in the 2009 review i Information updated during the 2009 review

This document was produced under U.S. Department of Education Cooperative Agreement #H326E070004 with the American Institutes for Research. Grace Zamora Durán and Tina Diamond served as the project officers. The views expressed herein do not necessarily represent the positions or policies of the Department of Education. No official endorsement by the U.S. Department of Education of any product, commodity, service or enterprise mentioned in this publication is intended or should be inferred.

Progress Monitoring Tools Chart: Reading and Math

Updated June 5, 2009

The tools chart below reflects the results of the first annual review of progress monitoring tools by the Center's Technical Review Committee (TRC).

The National Center on Response to Intervention defines progress monitoring as repeated measurement of academic performance to inform instruction of individual students in general and special education in grades K-8. It is conducted at least monthly to (a) estimate rates of improvement, (b) identify students who are not demonstrating adequate progress and/or (c) compare the efficacy of different forms of instruction to design more effective, individualized instruction.

For more information on how to conduct progress monitoring in an RTI context, see the Center library's resources on progress monitoring at www.rti4success.org. A glossary of terms related to the technical adequacy of progress monitoring is available for printing.

Chart Features

The tools in this chart have been rated against one or both sets of technical adequacy standards related to progress monitoring: General Outcome Measures (GOMs) and Mastery Measures (MMs). Across the top of the chart are the standards by which the TRC reviews each tool. Interactive tabs on the tools chart found on the website provide users details descriptions of each standard and its ratings and implementation information provided by the vendors of the tools, including the cost of the tool, what is needed to implement it, the support you will receive from the vendor, how the tool is intended to be used, and with whom it should be used.

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General Outcome Measures

Tool	Area	Reliability of the Performance Level Score	Reliability of the Slope	Validity of the Performance Level Score	Predictive Validity of the Slope of Improvement	Alternate Forms	Sensitive to Student Improvement	End-of-Year Benchmarks	Rates of Improvement Specified	Norms Disaggregated for Diverse Populations	Disaggregated Reliability and Validity Data
AIMSweb	Math	●	●	●	●	●	●	●	●	No	●
	Oral Reading	●	●	●	●	●	●	●	●	No	●
	Test of Early Literacy – Letter Naming Fluency	●	●	●	●	●	●	●	●	No	●
	Test of Early Literacy – Letter Sound Fluency	●	●	●	●	●	●	●	●	No	●
	Test of Early Literacy – Nonsense Word Fluency	●	●	●	●	●	●	●	●	No	●
	Test of Early Numeracy – Phoneme Segmentation	●	●	●	●	●	●	●	●	No	●
	Test of Early Numeracy – Missing Number	●	●	●	●	●	—	—	—	No	●
	Test of Early Numeracy – Number ID	●	●	●	●	●	—	—	—	No	●
	Test of Early Numeracy – Oral Counting	●	●	●	●	●	—	—	—	No	●
	Test of Early Numeracy – Quantity Discrimination	●	●	●	●	●	—	—	—	No	●
Curriculum Based Measurement in Reading (CBM-R)	Letter Sound Fluency	●	●	●	●	●	●	●	●	No	—
	Maze Fluency	●	●	●	●	●	●	●	●	No	—
	Passage Reading Fluency	●	●	●	●	●	●	●	●	No	—
	Word Identification Fluency	●	●	●	●	●	●	●	●	No	—

Chart Legend: ● Convincing Evidence | ○ Partially Convincing Evidence or Convincing Indirect Evidence | ○ Unconvincing Evidence | — No Evidence Submitted

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General Outcome Measures Continues

Tool	Area	Reliability of the Performance Level Score	Reliability of the Slope	Validity of the Performance Level Score	Predictive Validity of the Slope of Improvement	Alternate Forms	Sensitive to Student Improvement	End-of-Year Benchmarks	Rates of Improvement Specified	Norms Disaggregated for Diverse Populations	Disaggregated Reliability and Validity Data
Dynamic Indicators of Basic Early Literacy Skills (DIBELS)	Initial Sound Fluency	●	—	●	—	●	●	○	○	No	—
	Nonsense Word Fluency	●	—	●	○	●	●	○	○	No	—
	Oral Reading Fluency	●	—	●	—	●	●	○	○	No	●
	Phoneme Segmentation Fluency	●	—	●	—	●	●	○	○	No	—
	Word Use Fluency	●	—	○	—	●	●	○	○	No	—
Monitoring Basic Skills Progress (MBSP)	Basic Math Computation	●	●	●	●	●	●	●	●	No	—
	Basic Math Concepts/ Applications	●	●	●	●	●	●	●	●	No	—
	Computation	○	●	●	●	●	—	—	—	No	—
	Concepts	○	●	●	●	●	●	—	—	No	—
	Oral Counting	○	●	●	—	—	●	—	—	No	—
mCLASS: Math	Missing Number	○	●	●	○	○	○	—	—	No	—
	Next Number	○	●	●	—	○	○	—	—	No	—
	Number Facts	○	●	●	○	○	—	—	—	No	—
	Number Identification	○	●	●	—	●	●	—	—	No	—
	Quantity Discrimination	○	●	●	○	○	—	—	—	No	—
Scholastic	Reading Inventory	—	●	—	—	●	●	—	—	No	—
STAR	Early Literacy	●	●	●	○	●	●	●	●	No	●
	Math	●	●	●	○	●	●	●	●	No	●
	Reading	●	●	●	○	●	●	●	●	No	●

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General Outcome Measures Continues

Tool	Area	Reliability of the Performance Level Score	Reliability of the Slope	Predictive Validity of the Shape of Improvement	Alternate Forms	Sensitive to Student Improvement	End-of-Year Benchmarks	Rates of Improvement Specified	Disaggregated for Diverse Populations	Disaggregated Reliability and Validity Data
STEEP	Oral Reading Fluency	●	●	●	●	●	●	●	No	—
Yearly Progress Pro	Math	●	●	●	●	●	●	●	No	—
	Reading Language Arts	●	●	●	●	●	●	●	No	—
	Reading Maze Fluency	●	●	●	●	●	●	●	No	—

Chart Legend: ● Convincing Evidence | ○ Partially Convincing Evidence or Convincing Indirect Evidence | ○ Unconvincing Evidence | — No Evidence Submitted

Mastery Measurement

Tool	Area	Skill Sequence	Sensitive to Student Improvement	Reliability	Pass/Fail Decision	Disaggregate Reliability and Validity Data
Accelerated Math	Math	●	●	●	●	—

Chart Legend: ● Convincing Evidence | ○ Partially Convincing Evidence or Convincing Indirect Evidence | ○ Unconvincing Evidence | — No Evidence Submitted